MIKHAYLOV, V.A.; KHARCHENKO, S.K.; NAZIN, A.G.

Study of the binary systems: wa' -tri -n-butylphosphate and water - di - n-butylphosphoric acid. Izv. Sib. otd. AN SSSR no.7:50-56 '62 (MIRA 17:8)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.

MIKHAYLOV, V.A.; NAZIN, A.G.

Study of simple extraction systems. Report No.1: The system water - tributylphosphate - potassium iodide. Izv. Sib. otd. AN SSSR no.9:54-64 '62. (MIRA 17:8)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.

DRAKIN, S.I.; MIKHAYLOV, V.A.

Calculation of the thermodynamic characteristics of the hydration of ions incapable of prolonged existence in an aqueous solution. Zhur.fiz.khim. 36 no.8:1698-1704 Ag '62. (MIRA 15:8)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva i Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.
(Ions) (Hydration) (Chemistry, Physical and theoretical)

MIKHAYLOV, V.A.; KIRGINTSEV, A.N.

Finding of break points on a curve. Zhur. fiz. khim. 36 no.9: 2085-2087 S '62. (MIRA 17:6)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.

MIKHAYLOV, V.A.; KHARCHENKO, S.K.

Study of the ternary system water - tri-n-butyl phosphate - di-n-butylphosphoric acid. Izv. SO AN SSSR no.3 Ser. khim. nauk no.1:70-82 '63. (MIRA 16:8)

1. Institut neorganicheskoy khimii Sibirskogo Otdeleniya AN SSSR, Novosibirsk.

(Butyl phosphates) (Phosphoric acid)
(Phase rule and equilibrium)

MIKHAYLOV, V.A.; KHARCHENKO, S.K.; NAZIN, A.G.

Extraction equilibria and the theory of nonelectrolyte solutions. Trudy Kom.anal.khim. 14:76-86 '63. (MIRA 16:11)

L 42979-65 EWT(m)/EWP(j)/T Pc-4 RM
ACCESSION NR: AP5009428 S/0289/64/000/003/0095/0104

AUTHOR: Torgov, V.G.; Nikolayev, A.V.; Mikhaylov, V.A.; Korolenok, L.N.; Stadnikova, L.G.; Kotlyarevskiy, I.L.

TITLE: Study of the extraction of uranyl nitrate by some derivatives of pyridine-N-oxide

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya khimicheskikh nauk, no. 3,

SOURCE: AN SSSR, Sibirskoye otdeleniye. Izvestiya. Seriya khimicheskikh nauk, no. 3, 1964, 96-104

TOPIC TAGS: uranyl nitrate extraction, uranium refining, pyridine oxide derivative, peroxyacetic acid, distribution isotherm, tributyl phosphate

ABSTRACT: The article describes new compounds of uranyl nitrate with derivatives of pyridine-N-oxide (synthesized by oxidizing the corresponding pyridines with peroxyacetic acid), and discusses the mechanism of extraction of uranyl nitrate by some of them. With regular pyridine-N-oxides containing one N→O group, uranyl nitrate forms compounds of the composition $UO_2(NO_3)_2 \cdot 2PyOx$; with molecules containing two N→O groups, it forms the compounds $UO_2(NO_3)_2 \cdot PyOx$. Isotherms of the distribution of uranyl nitrate between water and solutions of pyridine-N-oxides in some organic solvents

oxides in the region of uranyl nitrate concentrations corresponding to the linear portions

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L 42979-65
ACCESSION NR: AP5009428

of the isotherms and when tributyl phosphate is used is determined by the process

$$UO_2^{2+}\,aq + 2NO_3^-\,aq + 2PyOx_{org} \rightleftharpoons UO_2(NO_3)_2 \cdot 2PyOx_{org}.$$

To evaluate the extracting capacity of the various α-alkylpyridine-N-oxides, the equilibrium constants of this process were calculated. It was shown that these oxides are much more effective extracting agents for $UO_2(NO_3)_2$ than tributyl phosphate.

are much more effective extracting agents [illegible] 3/2

ASSOCIATION: Institut neorganicheskoy khimii Sibirskogo otdeleniya Akademii nauk SSSR, Novosibirsk (Institute of Inorganic Chemistry, Siberian Branch, Academy of Sciences of the SSSR)

SUBMITTED: 10Jul64 ENCL: 00 SUB CODE: IC

NO REF SOV: 005 OTHER: 003

llc

Card 2/2

MIKHAYLOV, V.A.; NAZIN, A.G.

Simplest extraction systems. Report No.2: Water-tributyl phosphate- silver nitrate. Izv. SO AN SSSR no.7 Ser. khim. nauk no.2:21-27 '64 (MIRA 18:1)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.

BR

ACCESSION NR: AP4029186 S/0078/64/009/004/0867/0875

AUTHOR: Mikhaylov, V. A.; Grigor'yeva, E. F.

TITLE: Salts of dialkylphosphoric acids

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 4, 1964, 867-875

TOPIC TAGS: dialkylphosphoric acid salt, dimethylphosphate, diethylphosphate, di-n-propylphosphate, di-n-butylphosphate, di-n-amylphosphate, copper di-butylphosphate, solubility, synthesis, physical chemical property, polymerization, reversible polymerization, mechanism, rare earth dialkylphosphate, extraction, rare earth extraction

ABSTRACT: A number of the metal salts of the five lower di-n-alkylphosphoric acids were synthesized, classified as to solubility, and some of their physical chemical properties were determined. The Ag, Zn, Cd, Pb, Ni, Co, Cu, La, Sc, Fe, UO_2, ZrO and Th salts of di-(methyl, ethyl, n-propyl, n-butyl, and n-amyl)-phosphoric acids were prepared from the appropriate metal carbonate

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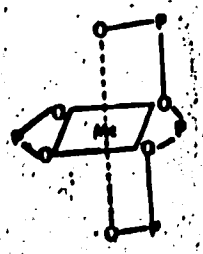
ACCESSION NR: AP4029186

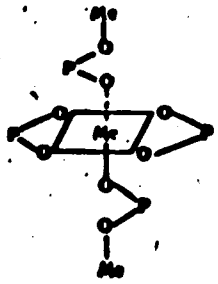
and the phosphoric acid: reaction with the rare earth salts were in aqueous solution; the dibutylphosphates of the other metals were precipitated from dibutylphosphoric acid saturated with the metal carbonate. The investigation of copper dibutylphosphate (W. H. V. Boldwin, C. E. Higgins. J. Inorg. and Nucl. Chem. 17, 334, (1961)) was extended. Cu, Ag, Zn, Cd, Pb, Ni and Co dibutylphosphates are monomeric in benzene solutions, but their reversible polymerization takes place on lowering the temperature. Possible causes for the dialkylphosphate polymerization are discussed. It is proposed that the lower three alkyl phosphates of lanthanum, which are water-soluble, crystalline and do not form high molecular weight products may be represented by the formula I:



Card 2/3

ACCESSION NR: AP4029186

while with increased alkyl chain length there is a transition to the polymeric chain structure II:



Data on the solubility and the formation of high molecular compounds is important in the extraction of the rare earth and other metals as the metal dialkylphosphates. Orig. art. has: 4 tables, 1 figure and 2 formulas

ASSOCIATION: Institut neorganicheskiy khimii Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Inorganic Chemistry, Siberian Branch, Academy of Sciences SSSR)

SUBMITTED: 01Mar63 DATE ACQ: 29Apr64 ENCL: 00
SUB CODE: CH NO REF SOV: 014 OTHER: 027

Card 3/3

MIKHAYLOV, V.A.; TORGOV, V.G. (Novosibirsk)

Determination of the activity coefficient of uranyl nitrate in dilute aqueous solutions by the extraction method. Zhur. fiz. khim. 38 no.2:280-286 F '64. (MIRA 17:8)

1. Sibirskoye otdeleniye AN SSSR, Institut neorganicheskoy khimii.

MIKHAYLOV, V.A.; KHARCHENKO, S.K.

Accounting for nonadditivity of molecular interactions in the lattice model of a solution. Zhur. fiz. khim. 38 no.10:2372-2379 O '64. (MIRA 18:2)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.

ACCESSION NR: AP4038525 S/0020/64/156/003/0616/0618

AUTHOR: Nikolayev, A. V. (Corresponding member); Torgov, V. G.; Mikhaylov, V. A.; Kotlyarevskiy, I. L.

TITLE: Uranyl nitrate extraction with pyridine-1-oxide derivatives

SOURCE: AN SSSR. Doklady*, v. 156, no. 3, 1964, 616-618

TOPIC TAGS: uranyl nitrate extraction, solvent extraction, alpha-alkylpyridine-1-oxide, extracting agent, extraction mechanism, extracting capability

ABSTRACT: The mechanism of solvent extraction of uranyl nitrate with α-alkylpyridine-1-oxides has been studied to discover an extracting agent for uranyl nitrate superior to those presently known, such as tributylphosphate (TBP), in respect to the solubility of their solvates in various organic solvents. The distribution isotherms of uranyl nitrate between the aqueous and organic phases and direct synthesis indicated that the formation of the disolvate

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ACCESSION NR: AP4038525

is the factor limiting uranyl nitrate concentration in the organic phase. An analogy was noted in the mechanism of extraction between α-alkylpyridine-1-oxides and neutral phosphoorganic compounds (TBP). On the basis of experimental equilibrium constants of the extraction process, the extracting capability of α-alkylpyridine-1-oxides was found to be 100 to 200 times higher than that of TBP. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: Institut neorganicheskoy khimii Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Inorganic Chemistry, Siberian Department, Academy of Sciences, SSSR)

SUBMITTED: 10Feb64 DATE ACQ: 09Jun64 ENCL: 00

SUB CODE: GC NO REF SOV: 002 OTHER: 010

Card 2/2

MIKHAYLOV, V.A.; TIKHOV, V.G.

Extraction of products of uranyl nitrate hydrolysis by α-n-amylpyridine-N-oxide. Zhur.neorg.khim. 10 no.12: 2780-2786 D '65. (MIRA 19:1)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.

MIKHAYLOV, V.A.; NAZIN, A.G.

Salting of tributyl phosphate into aqueous solutions of uranyl nitrate. Zhur. fiz. khim. 39 no.9:2312-2314 S '65.
(MIRA 18:10)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.

L 29775-66 EWT(m)/EWP(t)/ETI IJP(c) JD
ACC NR: AP6015072 (A) SOURCE CODE: UR/0363/66/002/005/0886/0889

AUTHOR: Mikhaylov, V. A.; Popov, A. N.; Gorbachev, V. M.; Torgova, E. I.

ORG: Institute of Inorganic Chemistry, SO, Academy of Sciences, SSSR (Institut neorganicheskoy khimii SO Akademii nauk SSSR)

TITLE: Oxidation of PCl_3 microimpurity to $POCl_3$ in a methyltrichlorosilane medium

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 5, 1966, 886-889

TOPIC TAGS: phosphorus chloride, silane, chemical oxidation

ABSTRACT: The oxidation of PCl_3 in methyltrichlorosilane CH_3SiCl_3 (MTCS) was studied in connection with the necessity of thoroughly removing phosphorus impurity from MTCS when the latter is used for preparing semiconducting silicon carbide. The possibility of oxidizing microquantities of trivalent phosphorus was checked on PCl_3 present in amounts of $1.3\text{-}2.6 \times 10^{-4}$ wt % in MTCS, the P^{32} radioisotope being used as the label. The oxidation of such small amounts of trivalent phosphorus was found to be inhibited by trace impurities. A fast and complete oxidation of PCl_3 to $POCl_3$ by atmospheric oxygen takes place when PCl_3 is present in amounts greater than 0.1

Card 1/2 UDC: 546.18 + 546.287

L 29775-66

ACC NR: AP6015072

vol % in purified MTCS. However, the introduction of $>6\times10^{-4}$ wt % $FeCl_3$ also stops the oxidation of macroquantities of PCl_3. A complete conversion of macro- and microquantities of PCl_3 into $POCl_3$ in a medium of technical MTCS or MTCS contaminated with iron compounds is achieved by using ozonized air or air containing 20-30 vol % Cl_2 or NO_2. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 07/20/ SUBM DATE: 06Aug65/ ORIG REF: 005/ OTH REF: 006

Card 2/2

ACC NR: AP6036762 SOURCE CODE: UR/0020/66/171/001/0147/0150

AUTHOR: Mikhaylov, V. A.; Korniyevich, M. V.; Polovinkina, R. A.

ORG: Institute of Inorganic Chemistry, Siberian Section, Academy of Sciences, SSSR (Institut neorganicheskoy khimii Sibirskogo otdeleniya Akademii nauk SSSR); Novosibirsk State University (Novosibirskiy gosudarstvennyy universitet)

TITLE: Method of determining the electric mobility of impurities in liquid metals and the mobility of bismuth in liquid gallium

SOURCE: AN SSSR. Doklady, v. 171, no. 1, 1966, 147-150

TOPIC TAGS: bismuth, gallium, nonferrous liquid metal

ABSTRACT: In order to find a method for extrapolating apparent values of the mobility u of an impurity in a liquid metal to zero time, an analysis was made of the kinetic curves of the accumulation of an impurity in a capillary, curves obtained by L. I. Ponomareva by solving with a computer the electrodiffusion equation

$$\frac{\partial c}{\partial \theta} = \frac{\partial^2 c}{\partial z^2} - S\frac{\partial c}{\partial z},$$

where c is a dimensionless concentration N/N_0, z a dimensionless length x/L (L being the length of the capillary), θ dimensionless time Dt/L^2 (D is the diffusion coefficient, t the time) and S a dimensionless parameter equal to BL/D (B is the velocity

Card 1/2 UDC: 541.13:546.3-19'681'87

ACC NR: AP6036762

of the impurity equal to the product of true mobility u_0 and the potential gradient). The analysis showed that the dependence of the observed mobility on θ at constant S is approximately linear in the range of considerable change in θ. At constant D and L, θ is proportional to the time of passage of the current, so that the extrapolation to zero time can be carried out in the coordinates u-t. The proposed method permits the determination of the effective diffusion coefficient D together with the mobility from the slope of the kinetic curves. The method was applied to the determination of the mobility of bismuth in liquid gallium. At Bi concentrations of 0.4 and 0.02%, the mobility values are $(5.80 \pm 0.19)\ 10^{-3}$ and $(6.77 \pm 0.50)\ 10^{-3}$ cm^2/V sec respectively. The paper was presented by Academician Voyevodskiy, V. V., 12 Feb 66. Orig. art. has: 4 figures and 5 formulas.

SUB CODE: 20, 11/ SUBM DATE: 01Feb66/ ORIG REF: 003/ OTH REF: 008

Card 2/2

MERZLENKO, V.Ya., kand.tekhn.nauk; KUZNETSKIY, V.I., starshiy nauchnyy sotrudnik, kand.tekhn.nauk; MIKHAYLOV, V.A., starshiy nauchnyy sotrudnik, kand.tekhn.nauk

High-capacity installations and efficient methods of drinking water purification. Sbor.nauch.trud.RNII AKKH no.[illegible] '63. (MIRA 17:10)

1. Rukovoditel' sektora vodosnabzheniya Rostovskogo promstroyissledovatel'skogo instituta Akademii kommunal'nogo khozyaystva (for Merzlenko).

KOGARKO, S.M.; LYAMIN, A.G., MIKHAYLOV, V.A.

Studying the decomposition of acetylene and the flame passage through a packed scrubber at low pressures. Khim. prom. 41 no.8:621-625 Ag '65. (MIRA 18:9)

1. Institut khimicheskoy fiziki AN SSSR.

MIKHAYLOV, V.A.; ROYNISHVILI, V.N.; CHIKOVANI, G.Ye.

Spark chamber with a large discharge gap. Fiz. chast. vys. energ. no.1:85-89 '65. (MIRA 18:12)

MIKHAYLOV, Vladimir Aleksandrovich; RUKAVISHNIKOV, Sergey Borisovich; FREYDZON, Isaak Rubinovich; VYLKOST, V.D., inzh., retsenzent; KHAYKIN, A.B., kand. tekhn. nauk dots, retsenzent; NORNEVSKIY, B.I., prof., nauchn. red.

[Electric propulsion of ships and electric driving of ship mechanisms] Elektrodvizhenie sudov i elektroprivod sudovykh mekhanizmov. Leningrad, Sudostroenie, 1965. 606 p. (MIRA 18:7)

ACC NR: AM5025912 (N) Monograph UR/

Mikhaylov, Vladimir Aleksandrovich; Rukavishnikov, Sergey Borisovich; Freydzon, Isaak Rubinovich

Electric operation of ships and electric drive in ship mechanisms (Elektrodvizheniye sudov i elektroprivod sudovykh mekhanizmov) Leningrad, Izd-vo "Sudostroyeniye," 1965. 606 p. illus., biblio., tables. 4400 copies printed.

TOPIC TAGS: ship building, electric drive

PURPOSE AND COVERAGE: This book is intended for students specializing in electrical equipment of ships in advanced maritime schools. It may also be useful to ship designers. The book deals with the theory and methods of calculating automatic electric drives of ship screws and auxiliary electrical systems. It describes the electric drives of ship steering mechanisms, loading devices, pumps, ventilators, and compressors.

TABLE OF CONTENTS:

Card 1/3 UDC 629.12: 621.31

ACC NR: AM5025912

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ACC NR: AM5025912

SUB CODE: 13/ SUBM DATE: 24Apr65/ ORIG REF: 039/ OTH REF: 001

Card 3/3

STERMAN, L.S., doktor tekhn.nauk; MIKHAYLOV, V.D., inzh.

Determination of critical thermal currents during the boiling of a high-boiling heat carrier in pipes. Teploenergetika 10 no.2:82-87 F '63.
(MIRA 16:2)

1. Moskovskiy energeticheskiy institut.
(Heat—Transmission) (Steam)

ACCESSION NR: AP4012790 S/0170/64/000/002/0010/0014

AUTHOR: Sterman, L. S.; Mikhaylov, V. D.

TITLE: Study of critical heat fluxes during surface boiling of organic liquids in tubes

SOURCE: Inzhenerno-fizicheskiy zhurnal, no. 2, 1964, 10-14

TOPIC TAGS: heat flux, surface boiling, organic liquid

ABSTRACT: The choice of heat fluxes in newly designed devices cannot be accomplished without knowing the magnitudes of the critical heat fluxes. Most of the existing quantitative relationships are based on data from experiments with water; studies of organic carriers are not very numerous. The present experiment used the procedures and experimental devices described earlier by the authors (Teploenergetika, No 2, 1963), and it studied 95.6-96.0% pure ethyl alcohol. Experimental results are presented on Figures 1 and 2 of Enclosures 1 and 2. An analysis of various results shows that within the investigated range of values the size of the tube does not affect the magnitudes of the critical heat flux. It is also found that none of the formulas proposed by various Soviet authors can be used for the

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ACCESSION NR: AP4012790

determination of the critical flux values for the surface boiling of ethyl alcohol in tubes. Orig. art. has 3 figures and 1 table.

ASSOCIATION: Energeticheskiy institut (Power Engineering Institute), Moscow

SUBMITTED: 10Jun63 DATE ACQ: 26Feb64 ENCL: 02

SUB CODE: AI, PH NO REF SOV: 012 OTHER: 000

Card 2/2

ACCESSION NO: AP4012342 S/0096/64/000/002/0078/0081

AUTHORS: Shly*kov, Yu. P. (Candidate of technical sciences); Abramov, A. I. (Engineer); Leongardt, A. D. (Engineer); Mikhaylov, V. D. (Engineer)

TITLE: Critical thermal load in forced monoisopropyldiphenyl flow in tubes and channels

SOURCE: Teploenergetika, no.2 , 1964, 78-81

TOPIC TAGS: monoisopropyldiphenyl, forced flow, critical thermal load, underheat, saturation temperature

ABSTRACT: An experimental investigation has been made of critical thermal loads in monoisopropyldiphenyl (MIPD) forced flow on a flat plate and in a tube under large flow and temperature variations. The flow analyses were conducted in a closed circuit system with all structural components in contact with MIPD made from 1Kh18N9T steel. Pressure measurements were made by a differential manometer type DSE-9A and a secondary instrument DSPI-02. Heating was accomplished electrically, and the thermocouple measurements were recorded on EPP-09 potentiometer. The critical thermal load for the plates varied from 3.7×10^6 to 4.8×10^6 kcal/m^2 hr

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ACCESSION NO: AP4012342

at speeds of 6.3 m/sec and 4.2 m/sec, underheat temperature variation range from 120 to 195C, and pressures of 3 to 6 atm. It is shown that the critical thermal flow varies linearly with the underheat temperature. A similar study in a 10-mm by 150-mm tube yields the same result up to 100C, after which the slope of linear growth of critical heat flow versus temperature decreases by about 20%. The experimental results indicate that forced flow of MIPD attains large critical thermal flow values before reaching saturation temperatures. Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00	DATE ACQ: 14Feb64	ENCL: 00
SUB CODE: AI	NO REF SOV: 006	OTHER: 001

Card 2/ 2

L 36735-65 EWT(1)/EPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/EWG(m)/T/EFR/EWP(t)/EWP(b)
ACCESSION NR: AT5007903 Pr-4/Ps-4/Pu-4 S/0000/64/000/000/0107/0124
RM/DJ/GS

38

AUTHOR: Sterman, L. S.; Mikhaylov, V. D.; Vilemas, Yu.; Loginov, A. A.; Abramov, A. I. B+1

TITLE: Determination of critical heat fluxes when boiling high-boiling organic heat-transfer agents in tubes

SOURCE: Moscow. Institut atomnoy energii. Issledovaniya po primeneniyu organicheskikh teplonositeley-zamedliteley v energeticheskikh reaktorakh (Research on the use of organic heat-transfer agents and moderators in power reactors). Moscow, Atomizdat, 1964, 107-124

TOPIC TAGS: organic cooled reactor, thermal reactor, power reactor, nuclear power plant, reactor coolant, heat transfer agent, critical heat flux, biphenyl, isopropylbiphenyl

ABSTRACT: Critical heat fluxes were investigated during the surface boiling of high-temperature organic heat-transfer agents [monoisopropylbiphenyl] a mixture of biphenyl (26.5%) and biphenyl oxide (73.5%), and biphenyl] in a tube. All the tests were conducted in a tube having a 10-mm inner diameter and a wall 1.5 mm thick. Experimental values of q_{crit} were obtained for monoisopropylbiphenyl and

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L 36735-65

ACCESSION NR: AT5007903 0

circulation rates of 4 and 8 m/sec with a saturation temperature from 0 to 194C. The tests on the mixture of biphenyl and biphenyl oxide were conducted at pressures of 1, 3, 5, and 10 atm. and circulation rates of 5-15 m/sec with a temperature of 0 - 160C. It is pointed out that none of the existing formulas can be used to determine q_{crit} during surface boiling of these fluids. The authors conclude by deriving an equation for determining q_{crit} for volume and surface boiling under conditions of forced motion of a medium. Orig. art. has: 8 figures, 2 tables, and 14 formulas.

ASSOCIATION: Institut atomnoy energii, Moscow (Institut of Atomic Energy)

SUBMITTED: 01Aug64 ENCL: 00 SUB CODE: NP, TD

NO REF SOV: 020 OTHER: 007

Card 2/2

L 43739-65 EWT(m)/EWA(m)-2

ACCESSION NR: AP5006520 S/0056/65/048/002/0695/0700

AUTHOR: Mikhaylov, V. D.

TITLE: Angular distributions during charged particle pair production

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 2, 1965, 695-700

TOPIC TAGS: angular distribution, particle angular distribution, electron positron pair, fast charged particle

ABSTRACT: The angular distributions of secondary particles formed during electron-positron pair production by a fast charged particle in the field of the nucleus are calculated. Distributions are obtained for the pair particles

$$d\sigma = \frac{16}{9\pi} Z^2 e^6 \frac{p_\perp dp_\perp}{(1+p_\perp^2)^2} \ln^3 \frac{E}{\mu} \left[1 + \frac{p_\perp^2}{(1+p_\perp^2)^2}\right],$$

as well as for the impinging particle after collision

$$d\sigma = \frac{28}{9} \frac{Z^2 e^6}{(2\pi)^5} \ln \frac{E}{2p_\perp \mu} \ln \mu \frac{dp_\perp}{p_\perp^3}.$$

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L 43739-65

ACCESSION NR: AP5006520

3

A graph of the particle distribution for an electron-positron pair is given in fig. 1 of the Enclosure. "In conclusion the author expresses gratitude to I. L. Rosental', and also to G. T. Zatsepin and participants in a seminar conducted by him for discussion." Orig. art. has: 2 figures, 19 formulas.

ASSOCIATION: Moskovskiy inzhenerno-fizicheskiy institut (Moscow Engineering Physics Institute)

SUBMITTED: 18Jul64 ENCL: 01 SUB CODE: NP

NO REF SOV: 001 OTHER: 003

Card 2/3

MIKHAYLOV, V.D., inzhener.

Mechanizing foundry shops in the Ministry's plants. Stroi. i dor. mashinostr. 1 no.3:23-27 Mr '56. (MLRA 10:1)
(Foundries)

MIKHAYLOV, V.D., inzhener.

Inventions and efficiency promotion in the building and road building machinery industry. Izobr.v SSSR 2 no.5:38-39 My '57. (MLRA 10:7)

(Road machinery) (Building machinery industry)

Mikhaylov, V.D.

MIKHAYLOV, V.D., inzhener.

Building-machinery industry in the U.S.S.R. Stroi.i dor.mashinostr. 2 no.10:22-26 O '57. (MIRA 10:11)
(Building machinery industry--History)

MIKHAYLOV, V.D., otv. red.; ROZENTAL', I.L., otv. red.; PCHELINTSEVA, G.M., red.; VINOGRADOVA, Ye.M., red.; VLASOVA, N.A., tekhn. red.

[Some problems in the physics of elementary particles and of the atomic nucleus] Nekotorye voprosy fiziki elementarnykh chastits i atomnogo iadra. Otvet. red. V.D.Mikhailov i I.L. Rozental'. Moskva, Gosatomizdat, 1962. 134 p.
(MIRA 15:7)

1. Moscow. Inzhenerno-fizicheskiy institut.
(Particles (Nuclear physics)) (Nuclei, Atomic)

L 17215-63 EWT(1)/EWT(m)/BDS/ES(w)-2 AFFTC/ASD/SSD Pab-4

ACCESSION NR: AP3005298 S/0056/63/045/002/0383/0385

AUTHOR: Mikhaylov, V. D.

TITLE: Reaction with colliding electron beams

SOURCE: Zhur. eksper. i teoret. fiz., v. 45, no. 2, 1963, 383-385

TOPIC TAGS: colliding beam, electron-electron scattering, electron-positron annihilation, muon pair production

ABSTRACT: An estimate is made of the energies and the angles at which the cross section (both differential and integral) for muon pair production in colliding electron-electron beams becomes greater than the cross section for muon pair production in electron-positron beams. This problem is of interest because colliding electron-electron beams are easier to obtain in practice. It is found that for an electron c.m.s. energy of 1.5 or 2 BeV the electron-electron cross section exceeds the electron-positron one for practically no

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L 17215-63
ACCESSION NR: AP3005298

angles, the transition occurring at about 1.2 BeV. However, as soon as the energy becomes even slightly smaller than this critical value, there exists a large range of angles for which the electron-positron cross section is larger. "The author is grateful to I. L. Rozental' for suggesting the problem and discussions." Orig. art. has 5 formulas and 1 figure.

ASSOCIATION: Moskovskiy inzhenerno-fizicheskiy institut (Moscow Physics Engineering Institute)

SUBMITTED: 04May63 DATE ACQ: 06Sep63 ENCL: 00

SUB CODE: PH NO REF SOV: 001 OTHER: 000

Card 2/2

S/053/63/079/003/003/003
B117/B186

AUTHORS: Birger, N. G., Mikhaylov, V. D., Rozental', I.L., Sarycheva, L. I.

TITLE: Strong interactions at high energies

PERIODICAL: Uspekhi fizicheskikh nauk, v. 79, no. 3, 1963, 523 - 544

TEXT: In this survey of papers by western and Soviet authors, published from 1949 through 1962, experimental data on the interaction of high-energy particles are compared with the theory. The following problems are handled: (1) Main theoretical results; (a) polar approximation; (b) method of complex orbital momenta; (c) relationship between the cross sections (nuclear cross sections); theorem of Pomeranchuk (I. Ya. Pomeranchuk, ZhETF 34, 725 (1958). (2) Interaction cross section of pions and nucleons of energies of 2 to 28 Bev with nucleons; (a) total interaction cross section of particles and antiparticles with protons; (b) elastic scattering of protons and pions. (3) Interaction cross section of high-energy pions and nucleons with atomic nuclei; (a) particularities in the measurement of the interaction cross sections of cosmic particles; (b)
Card 1/2

Strong interactions at ...

S/053/63/079/003/003/003
B117/B186

determination of the interaction cross sections in air which is based on the measurement of the absorption of the nucleon component; (c) determination of the interaction cross sections of particles of ultra high energy, $> 10^4$ Bev. There are 12 figures, 5 tables, and 83 references.

Card 2/2

STERMAN, L. S.; MIKHAYLOV, V. D.; VILEMAS, Yu.; ABRAMOV, A. I.

"Critical heat flows in boiling of organic fluids in tubes and in large volume."

paper submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May1964.

Power Inst, Moscow.

L 40887-66 EWT(1)/EWT(m)/EWP(j) RM/GD/WW

ACC NR: AT6021841 (A) SOURCE CODE: UR/0000/65/000/000/0131/0145

AUTHOR: Sterman, L. S.; Mikhaylov, V. D.; Vilemas, Yu.; Abramov, A. I.

ORG: Moscow Power Institute (Moskovskiy energeticheskiy institut) 35 B+1

TITLE: Critical heat fluxes in boiling of organic heat transfer media in tubes and in a large volume

SOURCE: Teplo- i massoperenos. t.III: Teplo- i massoperenos pri fazovykh prevrashcheniyakh (Heat and mass transfer. v. 3: Heat and mass transfer in phase transformations). Minsk, Nauka i tekhnika, 1965, 131-145

TOPIC TAGS: boiling, heat flux, heat transfer fluid

ABSTRACT: Experiments on surface boiling in tubes were carried out in an experimental unit consisting of a closed loop with forced circulation. All the tests were made on a tube with an inside diameter of 10×10^{-3} meters, made of 1Kh18N9T steel. Values of the critical heat flux, q_{cr}, were obtained for monoisopropyldiphenyl at pressures of (2, 3, 5, 7, 8) $\times 10^5$ newtons/m^2 and circulation rates of 4 and 8 meters/sec, while the underheating of the liquid up to the saturation temperature varied from 0 to 190°C. With Dowtherm, the pressures were (1, 3, 5, 10) $\times 10^5$

Card 1/2

L 40337-66

ACC NR: AT6021841

newtons/m^2 and the circulation rates from 5 to 15 meters/sec, while the underheating varied from 0 to 160°C. With ethyl alcohol, the pressures were (2, 5, 12.5) x 10^5 newtons/m^2 and the circulation rates were 4, 8, and 15 meters/sec, while the underheating varied from 0 to 100°C. The article derives empirical dimensionless equations both for boiling in tubes and in a large volume (pool boiling). These equations are tested on existing experimental data from the literature and the results of the comparison are exhibited in a series of curves. Orig. art. has: 16 formulas, 6 figures and 3 tables.

SUB CODE: 20/ SUBM DATE: 09Dec65/ ORIG REF: 029/ OTH REF: 009

Card 2/2 MLP

MIKHAYLOV, V.D.

Angular distributions in the process of pair production by a charged particle. Zhur. eksp. i teor. fiz. 48 no.2: 695-700 F '65. (MIRA 18:11)

1. Moskovskiy inzhenerno-fizicheskiy institut.

ACCESSION NR: AP4043309 S/0143/64/000/007/0108/0110

AUTHOR: Mikhaylov, V. D. (Engineer); Abramov, A. I. (Engineer)

TITLE: Determination of burnout heat flux during the boiling of monoisopropylbiphenyl in a tube

SOURCE: IVUZ. Energetika, no. 7, 1964, 108-110

TOPIC TAGS: heat exchange, heat exchanger, burnout heat flux

ABSTRACT: The results of an experimental investigation of the critical heat flux of monoisopropylbiphenyl under surface-boiling conditions in 10-mm-diameter, 100-mm-long tubing are reported; the experimental setup and methods were described earlier by L.S. Sterman and V. D. Mikhaylov (Teploenergetika, no. 2, 1963). The critical heat flux was measurdd at 2 and 8 atm and at circulation velocities of 4 and 8 m/sec, with subcooling temperatures (below the saturation temperature) of 0—194C. The effect of the circulation rate on the critical heat flux was also measured at 2 atm. Orig. art. has: 2 figures.

Card 1/2

ACCESSION NR: AP4043309

ASSOCIATION: Moskovskiy ordena Lenina energeticheskiy institut (Moscow Power-Engineering Institute)

SUBMITTED: 30Oct63 ATD PRESS: 3078 ENCL: 00

SUB CODE: OC, ED NO REF SOV: 004 OTHER: 000

Card 2/2

MIKHAYLOV, V.F., doktor tekhnicheskikh nauk, professor; TRET'YAKOV, A.P., kandidat tekhnicheskikh nauk.

Method of drawing up intensive schedules of locomotive utilization. Trudy MIIT no.79:174-215 '53. (MLRA 8:5)
(Locomotive--Performance)

NIKOLAYEV, Ivan Ivanovich, professor, redaktor; MIKHAYLOV, Vladimir Fedorovich, professor; TRET'YAKOV, Aleksandr Petrovich, kandidat tekhnicheskikh nauk; BOCHAROV, Nikolay Filippovich, kandidat tekhnicheskikh nauk; TSELISHCHEV, P.A., inzhener, redaktor; VERINA, G.P., tekhnicheskiy redaktor.

[Rolling stock and locomotives] Podvizhnoi sostav i tiaga.poezdov. Izd. 2-e, perer. Moskva, Gos. transportnoe zhel-dor. izd-vo, 1955. 439 p. (MLRA 8:6)

1. Chlen-korrespondent Akademii nauk SSSR (for Nikolayev).
(Railroads--Rolling stock) (Locomotives)

MIKHAYLOV, V.F.

Innovations suggested by V.V.TSekhmistrenko. Mashinostroitel' no.2:3-4 F '62. (MIRA 15:2)
(Ulyanovsk--Machine-tool industry--Technological innovations)

MIKHAYLOV, V.F.

The 6A21 turning and milling machine. Biul.tekh.-ekon.inform. no.2:19-20 '62. (MIRA 15:3)

(Milling machines)

MIKHAYLOV, V.F.

Modernization of the LS-80-3 machine. Mashinostroitel' no.4:16 Ap '62. (MIRA 15:5)
(Cutting machines—Technological innovations)

MIKHAYLOV, V.F.

Device for lapping working surfaces of micrometers. Mashinostroitel' no.8:22-23 Ag '62. (MIRA 15:8)
(Grinding machines)

MIKHAYLOV, V. F.

Universal expansion templet. Mashinostroitel' no.10:23 O '62.
(MIRA 15:10)

(Gauges)

MIKHAYLOV, V. F.

Attachment to a magnetic plate. Mashinostroitel' no.12:28 D '62. (MIRA 16:1)

(Grinding machines—Attachments)

GORYUSHKO, V.Ye. [Horiushko, V.IE.]; MIKHAYLOV, V.F. [Mykhailov, V.F.]; FOTHASHKOV, V.I., kand. tekhn. nauk; TKACH, G.A. [Tkach, H.A.], kand. tekhn. nauk

Control of carbonization and settling columns in the soda industry. Khim. prom. [Ukr.] no.4:42-45 O-D'63. (MIRA 17:6)

30143
S/194/61/000/007/073/079
D201/D305

9.6000 (1013, 1089, 1159)

AUTHORS: Isabayev, Ye.A., Kozak, L.V., Mikhaylov, V.F., Orlov, D.P., Starikov, V.M. and Chursin, G.P.

TITLE: Multi-channel amplitude analyzer with simple channel switching circuit

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1961, 34, abstract 7 K203 (V sb. Optika. Yadern. protsessy. Alma-Ata, 1959, 51-57)

TEXT: The description is given of the circuit of a 50-channel amplitude analyzer with amplitude-to-time conversion. The arrangement employs a simple time-discriminator circuit built around a 50-phase single-shot multivibrator, gating in sequence 50 coincidence circuits for the duration of 130 μ sec. The multi-vibrator is triggered by the leading edge of the transformed analyzed pulse of duration t. The trailing edge of the pulse is applied to the coincidence circuits and is transmitted to the output of the N-th channel,

Card 1/2

30143
S/194/61/000/007/073/079
D201/D305

Multi-channel amplitude analyzer...

with N defined as N = t/130 μ sec. Each channel is terminated in a counter. The analyzer is being used at the Kazakhstan State University. 6 references. [Abstracter's note: Complete translation]

Card 2/2

S/169/62/000/012/031/095
D228/D307

9.6150

AUTHOR: Mikhaylov, V.F.

TITLE: Simple multichannel amplitude pulse analyzer

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 12, 1962, 46, abstract 12A376 (Sb. nauchn. rabot Kafedry optiki i Kafedry experim. fiz., Kazakhsk. un-t, no. 2, 1960, 81-83)

TEXT: A simplified analyzer circuit is proposed for studying the emission spectra of radioactive compounds possessing weak activity. The circuit consists of a unit for forming a pulse with an amplitude proportional to that of the input pulse and with a preset duration. An ЭПП-09 (EPP-09) type potentiometer with a print carriage is used in the analyzer. The instrument exhibits a linear input amplitude characteristic up to 100 v and is very stable in prolonged measurements.
[Abstracter's note: Complete translation]

VB

Card 1/1

S/089/60/009/003/008/014
B006/B063

AUTHOR: Mikhaylov, V. F.

TITLE: A Simple Multi-channel Pulse-height Analyzer 19

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 3, pp. 217-219

TEXT: The writer of the present "Letter to the Editor" describes a pulse-height analyzer which, combined with a self-recording electropotentiometer, gives good results. Fig. 1 shows the circuit diagram of the pulse-forming block. The most suitable electropotentiometer for this analyzer is that of the type ЭПП-09 (EPP-09) which has a printing carriage and a millivolt scale. The circuit diagram and the mode of operation of this instrument are explained. The potentiometer indicated by R_3 in the circuit diagram is used for the zero adjustment of the carriage of the electropotentiometer. The paper tape of the recorder can be divided for the various channels according to the problem to be solved. The instrument has a linear amplitude characteristic up to an input voltage of 100 v. The spread of the calibration pulses does not

Card 1/2

exceed 2 mm. The analyzing circuit proved to be very stable in a continuous operation; the zero line did not shift even after several days. Fig. 2 shows the curve of pulse distribution among the channels (amplitudes) as resulting from the decoding of the alpha-particle pulse recording of U^{234} and U^{238} from a pulsed ionization chamber. The author thanks Ye. M. Kolesnikov for his assistance in the construction of the circuit. There are 2 figures.

SUBMITTED: May 28, 1960

√c

39171
S/120/62/000/003/044/048
E032/E114

2/6000

AUTHOR: Mikhaylov, V.F.

TITLE: The use of toluene-argon and n-heptane-argon mixtures as working gases for a pulsed ionization chamber

PERIODICAL: Pribory i tekhnika eksperimenta, no.3, 1962, 189-190

TEXT: The author has investigated the operational characteristics of a chamber filled with the above mixtures. Plane two-electrode geometry was employed (distance between electrodes 8 cm, working pressure 4 atm). The output was fed through a pre-amplifier, main amplifier and diode limiter into a 100-channel kicksorter AI-100-1 (AI-100-1). The α-particle source (uranium) was deposited electrolytically on a stainless steel disc and was placed directly on one of the electrodes (- 3000 V). The first tube of the pre-amplifier operated without a grid leak. The bandwidth of the amplifier was narrow: intrinsic rise time and pulse length were roughly 1.5 μsec. The figure shows the results obtained. The conclusion is that two-electrode chambers (without a grid) filled with the above

Card 1/1 2

The use of toluene-argon and ... S/120/62/000/003/044/048
E032/E114

mixtures may be used to study the energy distribution of α-particles emitted by some radioactive elements. There is 1 figure.

ASSOCIATION: Geologicheskiy institut AN SSSR
(Geological Institute AS USSR)

SUBMITTED: October 9, 1961

Legend to Figure: Pulse height distributions due to uranium α-particles: a - argon; b - argon with toluene (1) and n-heptane (2).

X

Card 2/2

S/007/63/000/001/001/001
B107/B186

AUTHORS: Cherdyntsev, V. V., Mikhaylov, V. F.

TITLE: A protogenic transuranium isotope

PERIODICAL: Geokhimiya, no. 1, 1963, 3-14

TEXT: Cm^{247} and its decay products Am^{243} and Pu^{239} were detected in six samples by alpha-spectrometry. Cm^{247} decays according to the scheme:

$$Cm^{247} \xrightarrow{\alpha} Pu^{243} \xrightarrow[4.98\ hr]{\beta} Am^{243} \xrightarrow[7950\ yr]{\alpha} Np^{239} \xrightarrow[2.364\ days]{\beta} Pu^{239} \xrightarrow[24360\ yr]{\alpha} U^{235}.$$

The half-life of Cm^{247} is $>4\cdot10^7$ yr (references see below); in the present paper, a complicated alpha-spectrum was found between 4.2 and 4.6 Mev; gamma-radiation energy ranges from 90 to 250 kev and the half-life is estimated to be $2.5\cdot10^8$ yr. Lines of 5.15 Mev and 5.27 Mev from Pu^{239} and Am^{243} were found in the alpha-spectrogram. Two molybdenite samples of pegmatite from Transcaucasia were studied (V. V. Cherdyntsev,

Card 1/2

A protogenic transuranium isotope

S/007/63/000/001/001/001
B107/B186

D. P. Orlov, Ye. A. Isabayev, V. I. Ivanov, Geokhimiya, no. 10, 840, 1961); age according to Ye. M. Kolesnikov GIN AN SSSR: 23 million years. Four different fossil bonds of paleolithic age were also studied. Uranium and thorium fractions were used to measure the alpha-spectra between 4.0 and 5.5 Mev. Preliminary measurements showed no spontaneous fission of Cm^{247}. The concentration in the minerals reaches 10^{-8} %, and the ratio Cm^{247}/U^{238} is 10^{-2} activity units. The striking accumulation of U^{235} in the above molybdenites is possibly due to the curium content. There are 5 figures and 3 tables. The most important English-language reference is: H. Diamond et al. Phys. Rev., 105, 679, 1957.

ASSOCIATION: Geologicheskiy institut AN SSSR, Moskva (Institute of Geology AS USSR, Moscow)

SUBMITTED: October 5, 1962

Card 2/2

MIKHAYLOV, V.F.

Use of mixtures of toluene-argon and H-heptane-argon as fillers for a pulse ionization chamber. Prib. i tekh. eksp. 7 no.3:189-190 My-Je '62. (MIRA 16:7)

1. Geologicheskiy institut AN SSSR.
(Ionization chambers)

CHERDYNTSEV, V.V.; MIKHAYLOV, V.F.

Primary transuranium isotope in nature. Geokhimiia no.1:3-14 Ja '63. (MIRA 16:9)

1. Geological Institute, Academy of Sciences U.S.S.R., Moscow. (Transuranium elements)

MIKHAYLOV, V.F.

Operation of time-delay electronic collimators in case the specimen is coated with a thin inactive film. Prib. i tekh. eksp. 8 no.5:49-50 S-O '63.

Apparatus for determining small quantities of radioelements by the method of alpha-gamma coincidence selection. 75-77 (MIRA 16:12)

1. Geologicheskiy institut AN SSSR.

KASINOV, B.N., inzh.; KOKIN, V.D., inzh.; MIKHAYLOV, V.F., inzh.

D-543 universal single-bucket frontal loader. Stroi. i dor. mash. 8 no.11:4-6 N '63. (MIRA 17:1)

MIKHAYLOV, V.G., dotsent, kandidat tekhnicheskikh nauk.

On the use of data in the All-Union State Standard 2185-43 to determine the basic parameters for reducing gears. Mauch.trudy MZPI no.2:107-110 '55. (MLRA 9:3)
(Gearing--Standards)

MIKHAYLOV, V.G.

Technical museums at the eight-year schools. Politekh. obuch. no.7: 46-50 Jl '59. (MIRA 12:9)

1.Pedagogicheskiy institut, g.Yelabuga.
(Children's museums)

MIKHAYLOV, V.G.

MIKHAYLOV, V.G., professor-doktor; BUCHNEV, V.K., kandidat tekhnicheskikh nauk, retsenzent; RADOMA, A., tekhnicheskiy redaktor.

[Drilling blast holes] Sverlenie shpurov. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1947. 191 p.
(Boring) (MLRA 7:8)

MIKHAYLOV, V. S.

Petroleum Engineering

"The Oil and Gas Well Driller" (for trade schools), Gostoptekhizdat, 1948

Summary No. 60, 20 May 52; BR-52056899

MIKHAILOV, V. G.

Author: Mikhailov, V. G.

Title: The mining instruments. (Gornyi instrument)

City: Moscow

Publisher: Publication of Coal Mining Industry

Date: 1950 167 pages

Available: Library of Congress

Source:: Monthly List of Russian Accessions, Vol. 3, Jan., 1950, p. 684

MIKHAYLOV, V.G., professor, doktor tekhnicheskikh nauk; SIMILEYSKIY, M.G., kandidat tekhnicheskikh nauk.

Experimental use of electric core drills for boring blast holes in hard rock. Bor'ba s sil. 1:83-89 '53. (MLRA 7:10)

1. Novocherkasskiy politekhnicheskiy institut (for Simileyskiy)
(ROCK DRILLS)

MIKHAYLOV, V.G., professor, doktor.;KHARLAMOV, V.I., assistant.

Experiments in drilling holes in iron ore. Nauch. trudy MPI 26:58-63 '55. (MLRA 9:12)

(Boring)

MIKHAYLOV, V.G., prof., doktor tekhn.nauk; ASYCHENKO, Ye.I., inzh.

Dry drilling of boreholes with circular cuts and removal of drill cuttings by means of a suction cleaner. Nauch.dokl.vys.shkoly; gor. delo no.2:32-36 '59. (MIRA 12:7)

1. Predstavlena kafedroy gornykh mashin i rudnichnogo transporta Novocherkasskogo politekhnicheskogo instituta im. S. Ordzhonikidze.
(Boring) (Vacuum cleaners)

MIKHAYLOV, V.G., prof., doktor tekhn.nauk; SIMILEYSKIY, M.G., dots., kand.tekhn.nauk; RYLEV, E.V., starshiy prepodavatel', kand. tekhn.nauk; SHAMSHIN, V.N., assistent

Investigation and selection of boring machine cutter bits. Trudy MPI 80:3-121 '59. (MIRA 13:12)
(Boring machinery)

SIL'NYA, V.G.; MIKHAYLOV, V.G.

Theory of the operation of a bucket loader on an incline. Trudy NPI 130:5-18 '61. (MIRA 15:4)
(Coal handling machinery)

RYUMIN, I.F.; MIKHAYLOV, V.G.

Improvement of the design of the GNL-30 loader and study of its performance in upraises. Trudy NPI 130:95-104 '61. (MIRA 15:4)
(Coal handling machinery)

MIKHAYLOV, V.G.; KRAPIVIN, M.G.; SIDOROV, S.I.

Study of cutters and conditions of drilling with manual electric drills. Sbor.nauch.trud.UkrNIISol' no.6:52-54 '62. (MIRA 17:3)

MIKHAYLOV, V.G., prof., doktor tekhn.nauk; SIMILEYSKIY, M.G., kand.tekhn. nauk; SHAMSHIN, V.N., inzh.

New bits for auger boring of blast holes. Gor.zhur. no.12:58-59 D '63. (MIRA 17:3)

1. Novocherkasskiy politekhnicheskiy institut.

SIDOROV, S.I.; MIKHAYLOV, V.G.; KRAPIVIN, M.G.

Drilling holes in rock salt using electric drills with mechanical feed. Sbor. nauch. trud. UkrNIISol' no.7:48-58 '64
(MIRA 18:1)

Investigations to determine the basic parameters of long-stroke drills for the drilling of rock salt. Ibid.:58-69

DUBYANSKIY, V.M.; MIKHAYLOV, V.G.

Theory of the analytical calculation of parameters in the breaking away of chips from a massif by planetary mining machine actuators. Trudy MPI 158:37-53 '64.

(MIRA 18:11)

DUBYANSKIY, V.M., inzh.; MIKHAYLOV, V.G., prof.; NIKOLIN, M.G., dotsent

Selecting efficient parameters for planetary actuating mechanisms on coal mining cutter-loaders. Izv. vys. ucheb. zav.; gor. zhur. 8 no.7:124-130 '65. (MIRA 18:9)

1. Novocherkasskiy politekhnicheskiy institut. Rekomendovana kafedroy gornykh mashin.

"Shear in Glued and Other Joints of Wooden Structures." Thesis for degree of Cand. Technical Sci. Sub 11 Oct 49, Central Sci Res Inst of Industrial Structures.

Summary 82, 13 Dec 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec 1949.

124-58-6-7242

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 6, p 128 (USSR)

AUTHOR: Mikhaylov, V.G.

TITLE: On the Rupture-strength Properties of Wood and a Method for Their Speedy Determination (O dlitel'nom soprotivlenii drevesiny i metode yego uskorennogo opredeleniya)

PERIODICAL: V sb.: Issledovaniya prochnosti i deformativnosti drevesiny. Moscow, Gos. izd-vo lit. po str-vu i arkhitekt., 1956, pp 107-117

ABSTRACT: The author makes the assumption that the ratio between long-term rupture strength and short-term ultimate strength for pine under conditions of transverse bending and compression in the direction of its grain does not exceed 0.5, and that, for spalling along a direction tangential to its grain, this ratio does not exceed 0.55.

B.N. Ugolev

1. Wood--Mechanical properties

Card 1/1

97-58-5-3/14

AUTHOR: Bukshteyn, D.I., Engineer; Mikhaylov, V.G., Candidate of Technical Sciences.

TITLE: Economic Evaluation of Precast Reinforced Concrete Constructions - Details and Products. (Metod ekonomicheskoy otsenki sbornykh-zhelezobetonnykh konstruktsiy, detaley i izdeliy)

PERIODICAL: Beton i Zhelezobeton, 1958, No. 5, USSR, Pp 170-174.

ABSTRACT: The method of cost of reinforced concrete constructions was worked out by V.A. Bushkov, Ya.A. Novikov, K.E. Tal', K.K. Antonov and E.I. Varenik. Formulae for the calculation of cost of precast reinforced concrete products are given and explained. The method of costing of various constructions is studied in the Nauchno-Issledovatel'skiy Institut Ekonomiki Stroitel'stva (Scientific Research Institute of Construction Economics, ASiA USSR) by Candidate of Technical Science S.K. Lazarevich. Formulae for cost of concrete mixes are given and explained. Table 1 gives transition coefficient from the geometric volume of the product to the volume of the concrete mix and Table 2 gives cost of concrete mix and consumption of cement. Formulae for the pricing of steel reinforcement is also given as well as the cost of

Card 1/2

Economic Evaluation of Precast Reinforced Concrete Constructions - Details and Products.

bending of the reinforcement. Table 3 gives the weight coefficient of the steel; Table 5 the cost of prestressing the reinforcement and Table 6 the same but in roubles per kg. Table 7 gives cost of the steel and cost of production of basic details. Formulae for casting and steam curing of products is included. Table 8 gives cost of casting and curing works. Table 9 gives cost of prestressed reinforced ribbed roofing slabs PKZhN-1 for industrial buildings. Problems of the selection of optimal technological processes for production were investigated at Giprotis by Engineers S.V. Filimonov and P.M. Sushkov.

Card 2/2 1. Reinforced concrete--Effectiveness 2. Reinforced concrete--Economic aspects 3. Construction--Costs

MURASHEV, V.A., prof., doktor tekhn.nauk; MIRONOV, S.A., prof., doktor tekhn.nauk; ALEKSANDROVSKIY, S.V., kand.tekhn.nauk; TAL', K.E., kand.tekhn.nauk; DMITRIYEV, S.A., kand.tekhn.nauk; MULIN, N.M., kand.tekhn.nauk; SIGALOV, E.Ye., kand.tekhn.nauk; NEMIROVSKIY, Ya.M., kand.tekhn.nauk; TABENKIN, N.L., inzh. [deceased]; KALATUROV, B.A., kand.tekhn.nauk; BRAUDE, Z.I., inzh.; KRYLOV, S.M., kand.tekhn.nauk; POKIN, K.F., doktor tekhn.nauk; GUSEV, N.M., prof., doktor tekhn.nauk; YAKOVLEV, A.I., inzh.; KORENEV, B.G., prof., doktor tekhn.nauk; DERESHKEVICH, Yu.V., inzh.; MOSKVIN, V.M.; LUR'YE, L.L., inzh.; MAKARICHEV, V.V., kand.tekhn.nauk; SHEVCHENKO, V.A., inzh.; VASIL'YEV, B.F., inzh.; KOSTYUKOVSKIY, M.G., kand.tekhn.nauk; MAGARIK, I.L., inzh.; IL'YASHEVSKIY, Ya.A., inzh.; LARIKOV, A.F., inzh.; STULOV, T.T., inzh.; TRUSOV, L.P., inzh.; LYUDKOVSKIY, I.G., kand.tekhn.nauk; POPOV, A.N., kand.tekhn. nauk; VINOGRADOV, N.M., inzh.; USHAKOV, N.A., kand.tekhn.nauk; SVERILOV, P.M., inzh.; TER-OVANESOV, G.S., inzh.; GLADKOV, B.N., kand.tekhn.nauk; KOSTOCHKINA, G.V., arkh.; KUREK, N.M.; OSTROVSKIY, M.V., kand.tekhn.nauk; PEREL'SHTEYN, Z.M., inzh.; BUKSHTEYN, D.I., inzh.;

(Continued on next card)

MURASHEV, V.A.---(continued) Card 2.
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